SEQUENCE LISTING

<110> Zhou, Qun-Yong
Ehlert, Frederick J.

<120> Methods For Modulating Angiogenesis
Using Prokineticin Receptor Antagonists

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<150> US 60/426,203
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<151> 2000-11-03

<160> 39

<170> FastSEQ for Windows Version 4.0

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<211> 1377
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (55)...(369)

<400> 1
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1

aga ggt gcc acg cga gtc tca atc atg ctc ctc cta gta act gtg tct 105
Arg Gly Ala Thr Arg Val Ser Ile Met Leu Leu Leu Val Thr Val Ser
5 10 15

gac tgt gct gtg atc aca ggg gcc tgt gag cgg gat gtc cag tgt ggg 153
Asp Cys Ala Val Ile Thr Gly Ala Cys Glu Arg Asp Val Gln Cys Gly
20 25 30

gca ggc acc tgc tgt gcc atc agc ctg tgg ctt cga ggg ctg cgg atg 201
Ala Gly Thr Cys Cys Ala Ile Ser Leu Trp Leu Arg Gly Leu Arg Met
35 40 45

tgc acc ccg ctg ggg cgg gaa ggc gag gag tgc cac ccc ggc agc cac 249
Cys Thr Pro Leu Gly Arg Glu Gly Glu Glu Cys His Pro Gly Ser His

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 50                  55                  60                  65

aag gtc ccc ttc ttc agg aaa cgc aag cac cac acc tgt cct tgc ttg   297
Lys Val Pro Phe Phe Arg Lys Arg Lys His His Thr Cys Pro Cys Leu
                 70                  75                  80

ccc aac ctg ctg tgc tcc agg ttc ccg gac ggc agg tac cgc tgc tcc   345
Pro Asn Leu Leu Cys Ser Arg Phe Pro Asp Gly Arg Tyr Arg Cys Ser
             85                  90                  95

atg gac ttg aag aac atc aat ttt taggcgcttg cctggtctca ggatacccac  399
Met Asp Leu Lys Asn Ile Asn Phe
        100                 105

catccttttc tgagcacagc ctggattttt atttctgcca tgaaacccag ctcccatgac 459
tctcccagtc cctacactga ctaccctgat ctctcttgtc tagtacgcac atatgcacac 519
aggcagacat acctcccatc atgacatggt ccccaggctg gcctgaggat gtcacagctt 579
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aatgcaaatg gtggtggttc aatctaatct gatattgaca tattagaagg caattagggt 1179
gtttccttaa acaactcctt tccaaggatc agccctgaga gcaggttggt gactttgagg 1239
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<210> 2
<211> 105
<212> PRT
<213> Homo sapiens

<400> 2
Met Arg Gly Ala Thr Arg Val Ser Ile Met Leu Leu Leu Val Thr Val
 1               5                  10                  15
Ser Asp Cys Ala Val Ile Thr Gly Ala Cys Glu Arg Asp Val Gln Cys
            20                  25                  30
Gly Ala Gly Thr Cys Cys Ala Ile Ser Leu Trp Leu Arg Gly Leu Arg
        35                  40                  45
Met Cys Thr Pro Leu Gly Arg Glu Gly Glu Glu Cys His Pro Gly Ser
    50                  55                  60
His Lys Val Pro Phe Phe Arg Lys Arg Lys His His Thr Cys Pro Cys
65                  70                  75                  80
Leu Pro Asn Leu Leu Cys Ser Arg Phe Pro Asp Gly Arg Tyr Arg Cys
                85                  90                  95
Ser Met Asp Leu Lys Asn Ile Asn Phe
            100                 105
```

<210> 3
<211> 86
<212> PRT
<213> Homo sapiens

<400> 3
Ala Val Ile Thr Gly Ala Cys Glu Arg Asp Val Gln Cys Gly Ala Gly
 1   5   10   15
Thr Cys Cys Ala Ile Ser Leu Trp Leu Arg Gly Leu Arg Met Cys Thr
            20   25   30
Pro Leu Gly Arg Glu Gly Glu Glu Cys His Pro Gly Ser His Lys Val
        35   40   45
Pro Phe Phe Arg Lys Arg Lys His His Thr Cys Pro Cys Leu Pro Asn
    50   55   60
Leu Leu Cys Ser Arg Phe Pro Asp Gly Arg Tyr Arg Cys Ser Met Asp
65   70   75   80
Leu Lys Asn Ile Asn Phe
                85

<210> 4
<211> 1406
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (10)...(333)

<400> 4
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          Met Arg Ser Leu Cys Cys Ala Pro Leu Leu Leu Leu Leu Leu
           1   5   10

ctg ccg ccg ctg ctg ctc acg ccc cgc gct ggg gac gcc gcc gtg atc   99
Leu Pro Pro Leu Leu Leu Thr Pro Arg Ala Gly Asp Ala Ala Val Ile
 15   20   25   30

acc ggg gct tgt gac aag gac tcc caa tgt ggt gga ggc atg tgc tgt   147
Thr Gly Ala Cys Asp Lys Asp Ser Gln Cys Gly Gly Gly Met Cys Cys
                35   40   45

gct gtc agt atc tgg gtc aag agc ata agg att tgc aca cct atg ggc   195
Ala Val Ser Ile Trp Val Lys Ser Ile Arg Ile Cys Thr Pro Met Gly
             50   55   60

aaa ctg gga gac agc tgc cat cca ctg act cgt aaa gtt cca ttt ttt   243
Lys Leu Gly Asp Ser Cys His Pro Leu Thr Arg Lys Val Pro Phe Phe
         65   70   75

ggg cgg agg atg cat cac act tgc cca tgt ctg cca ggc ttg gcc tgt   291
Gly Arg Arg Met His His Thr Cys Pro Cys Leu Pro Gly Leu Ala Cys

```
     80                  85                  90

tta cgg act tca ttt aac cga ttt att tgt tta gcc caa aag          333
Leu Arg Thr Ser Phe Asn Arg Phe Ile Cys Leu Ala Gln Lys
 95                 100                 105

taatcgctct ggagtagaaa ccaaatgtga atagccacat cttacctgta aagtcttact 393
tgtgattgtg ccaaacaaaa aatgtgccag aaagaaatgc tcttgcttcc tcaactttcc 453
aagtaacatt tttatctttg atttgtaaat gatttttttt ttttttttta tcgaaagaga 513
attttacttt tggatagaaa tatgaagtgt aaggcattat ggaactggtt cttatttccc 573
tgtttgtgtt ttggtttgat ttggcttttt tcttaaatgt caaaaacgta cccattttca 633
caaaaatgag gaaaataaga atttgatatt ttgttagaaa aacttttttt ttttttctc 693
accaccccaa gccccatttg tgccctgccg cacaaataca cctacagctt ttggtccctt 753
gcctcttcca cctcaaagaa tttcaaggct cttaccttac tttatttttg tccatttctc 813
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ctgatgggaa tccagctttt tgctggcatt taaatagtga aaagagtgta tatgtgaact 933
tgacactcca aactcctgtc atggcacgga agctaggagt gctgctggac ccttcctaaa 993
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catttacttc ttttactttt tataaagttt tttttcctta gtctcctact tagagatatt 1173
ctagaaaatg tcacttgaag aggaagtatt tattttaatc tggcacaaca ctaattacca 1233
tttttaaagc ggtattaagt tgtaatttaa accttgtttg taactgaaag gtcgattgta 1293
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<210> 5
<211> 108
<212> PRT
<213> Homo sapiens

<400> 5
Met Arg Ser Leu Cys Cys Ala Pro Leu Leu Leu Leu Leu Leu Leu Pro
 1               5                  10                  15
Pro Leu Leu Leu Thr Pro Arg Ala Gly Asp Ala Ala Val Ile Thr Gly
            20                  25                  30
Ala Cys Asp Lys Asp Ser Gln Cys Gly Gly Gly Met Cys Cys Ala Val
        35                  40                  45
Ser Ile Trp Val Lys Ser Ile Arg Ile Cys Thr Pro Met Gly Lys Leu
    50                  55                  60
Gly Asp Ser Cys His Pro Leu Thr Arg Lys Val Pro Phe Phe Gly Arg
65                  70                  75                  80
Arg Met His His Thr Cys Pro Cys Leu Pro Gly Leu Ala Cys Leu Arg
                85                  90                  95
Thr Ser Phe Asn Arg Phe Ile Cys Leu Ala Gln Lys
            100                 105


<210> 6
<211> 81
<212> PRT
<213> Homo sapiens

<400> 6
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Ala Val Ile Thr Gly Ala Cys Asp Lys Asp Ser Gln Cys Gly Gly Gly
 1               5                  10                  15
Met Cys Cys Ala Val Ser Ile Trp Val Lys Ser Ile Arg Ile Cys Thr
            20                  25                  30
Pro Met Gly Lys Leu Gly Asp Ser Cys His Pro Leu Thr Arg Lys Val
        35                  40                  45
Pro Phe Phe Gly Arg Arg Met His His Thr Cys Pro Cys Leu Pro Gly
    50                  55                  60
Leu Ala Cys Leu Arg Thr Ser Phe Asn Arg Phe Ile Cys Leu Ala Gln
65                  70                  75                  80
Lys
```

<210> 7
<211> 21
<212> PRT
<213> Homo sapiens

<400> 7

```
Asn Asn Phe Gly Asn Gly Arg Gln Glu Arg Arg Lys Arg Lys Arg Ser
 1               5                  10                  15
Lys Arg Lys Lys Glu
            20
```

<210> 8
<211> 21
<212> PRT
<213> Homo sapiens

<400> 8

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Ser His Val Ala Asn Gly Arg Gln Glu Arg Arg Arg Ala Lys Arg Arg
 1               5                  10                  15
Lys Arg Lys Lys Glu
            20
```

<210> 9
<211> 19
<212> PRT
<213> Homo sapiens

<400> 9

```
Met Arg Gly Ala Thr Arg Val Ser Ile Met Leu Leu Leu Val Thr Val
 1               5                  10                  15
Ser Asp Cys
```

<210> 10
<211> 26
<212> PRT

<213> Homo sapiens

<400> 10
Met Arg Ser Leu Cys Cys Ala Pro Leu Leu Leu Leu Leu Leu Leu Pro
 1   5   10   15
Leu Leu Leu Thr Pro Pro Ala Gly Asp Ala
            20   25

<210> 11
<211> 96
<212> PRT
<213> Bombina variegata

<400> 11
Met Lys Cys Phe Ala Gln Ile Val Val Leu Leu Leu Val Ile Ala Phe
 1   5   10   15
Ser His Gly Ala Val Ile Thr Gly Ala Cys Asp Lys Asp Val Gln Cys
            20   25   30
Gly Ser Gly Thr Cys Cys Ala Ala Ser Ala Trp Ser Arg Asn Ile Arg
        35   40   45
Phe Cys Ile Pro Leu Gly Asn Ser Gly Glu Asp Cys His Pro Ala Ser
    50   55   60
His Lys Val Pro Tyr Asp Gly Lys Arg Leu Ser Ser Leu Cys Pro Cys
65   70   75   80
Lys Ser Gly Leu Thr Cys Ser Lys Ser Gly Glu Lys Phe Lys Cys Ser
                85   90   95

<210> 12
<211> 81
<212> PRT
<213> Dendroaspis polylepis polylepis

<400> 12
Ala Val Ile Thr Gly Ala Cys Glu Arg Asp Leu Gln Cys Gly Lys Gly
 1   5   10   15
Thr Cys Cys Ala Val Ser Leu Trp Ile Lys Ser Val Arg Val Cys Thr
            20   25   30
Pro Val Gly Thr Ser Gly Glu Asp Cys His Pro Ala Ser His Lys Ile
        35   40   45
Pro Phe Ser Gly Gln Arg Lys Met His His Thr Cys Pro Cys Ala Pro
    50   55   60
Asn Leu Ala Cys Val Gln Thr Ser Pro Lys Lys Phe Lys Cys Leu Ser
65   70   75   80
Lys

<210> 13
<211> 81
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic construct

<400> 13
Ala Val Ile Thr Gly Ala Cys Glu Arg Asp Val Gln Cys Gly Ala Gly
1 5 10 15
Thr Cys Cys Ala Ile Ser Leu Trp Leu Arg Gly Leu Arg Met Cys Thr
20 25 30
Pro Leu Gly Arg Glu Gly Glu Glu Cys His Pro Gly Ser His Lys Val
35 40 45
Pro Phe Phe Gly Arg Arg Met His His Thr Cys Pro Cys Leu Pro Gly
50 55 60
Leu Ala Cys Leu Arg Thr Ser Phe Asn Arg Phe Ile Cys Leu Ala Gln
65 70 75 80
Lys

<210> 14
<211> 86
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic construct

<400> 14
Ala Val Ile Thr Gly Ala Cys Asp Lys Asp Ser Gln Cys Gly Gly Gly
1 5 10 15
Met Cys Cys Ala Val Ser Ile Trp Val Lys Ser Ile Arg Ile Cys Thr
20 25 30
Pro Met Gly Lys Leu Gly Asp Ser Cys His Pro Leu Thr Arg Lys Val
35 40 45
Pro Phe Phe Arg Lys Arg Lys His His Thr Cys Pro Cys Leu Pro Asn
50 55 60
Leu Leu Cys Ser Arg Phe Pro Asp Gly Arg Tyr Arg Cys Ser Met Asp
65 70 75 80
Leu Lys Asn Ile Asn Phe
85

<210> 15
<211> 89
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic construct

<400> 15
Gly Ile Leu Ala Val Ile Thr Gly Ala Cys Glu Arg Asp Val Gln Cys
1 5 10 15

```
Gly Ala Gly Thr Cys Cys Ala Ile Ser Leu Trp Leu Arg Gly Leu Arg
            20                  25                  30
Met Cys Thr Pro Leu Gly Arg Glu Gly Glu Glu Cys His Pro Gly Ser
        35                  40                  45
His Lys Val Pro Phe Phe Arg Lys Arg Lys His His Thr Cys Pro Cys
    50                  55                  60
Leu Pro Asn Leu Leu Cys Ser Arg Phe Pro Asp Gly Arg Tyr Arg Cys
65                  70                  75                  80
Ser Met Asp Leu Lys Asn Ile Asn Phe
                85
```

<210> 16
<211> 85
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic construct

<400> 16

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Val Ile Thr Gly Ala Cys Glu Arg Asp Val Gln Cys Gly Ala Gly Thr
 1               5                  10                  15
Cys Cys Ala Ile Ser Leu Trp Leu Arg Gly Leu Arg Met Cys Thr Pro
            20                  25                  30
Leu Gly Arg Glu Gly Glu Glu Cys His Pro Gly Ser His Lys Val Pro
        35                  40                  45
Phe Phe Arg Lys Arg Lys His His Thr Cys Pro Cys Leu Pro Asn Leu
    50                  55                  60
Leu Cys Ser Arg Phe Pro Asp Gly Arg Tyr Arg Cys Ser Met Asp Leu
65                  70                  75                  80
Lys Asn Ile Asn Phe
                85
```

<210> 17
<211> 86
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic construct

<400> 17

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Ala Ala Ala Ala Ala Ala Cys Glu Arg Asp Val Gln Cys Gly Ala Gly
 1               5                  10                  15
Thr Cys Cys Ala Ile Ser Leu Trp Leu Arg Gly Leu Arg Met Cys Thr
            20                  25                  30
Pro Leu Gly Arg Glu Gly Glu Glu Cys His Pro Gly Ser His Lys Val
        35                  40                  45
Pro Phe Phe Arg Lys Arg Lys His His Thr Cys Pro Cys Leu Pro Asn
    50                  55                  60
Leu Leu Cys Ser Arg Phe Pro Asp Gly Arg Tyr Arg Cys Ser Met Asp
```

65 70 75 80
Leu Lys Asn Ile Asn Phe
85

<210> 18
<211> 87
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic construct

<400> 18
Met Ala Val Ile Thr Gly Ala Cys Glu Arg Asp Val Gln Cys Gly Ala
1 5 10 15
Gly Thr Cys Cys Ala Ile Ser Leu Trp Leu Arg Gly Leu Arg Met Cys
20 25 30
Thr Pro Leu Gly Arg Glu Gly Glu Glu Cys His Pro Gly Ser His Lys
35 40 45
Val Pro Phe Phe Arg Lys Arg Lys His His Thr Cys Pro Cys Leu Pro
50 55 60
Asn Leu Leu Cys Ser Arg Phe Pro Asp Gly Arg Tyr Arg Cys Ser Met
65 70 75 80
Asp Leu Lys Asn Ile Asn Phe
85

<210> 19
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic construct

<400> 19
Ala Val Ile Thr Gly Ala Cys Glu Arg Asp Val Gln Cys Gly
1 5 10

<210> 20
<211> 86
<212> PRT
<213> Homo sapiens

<400> 20
Met Val Ile Thr Gly Ala Cys Glu Arg Asp Val Gln Cys Gly Ala Gly
1 5 10 15
Thr Cys Cys Ala Ile Ser Leu Trp Leu Arg Gly Leu Arg Met Cys Thr
20 25 30
Pro Leu Gly Arg Glu Gly Glu Glu Cys His Pro Gly Ser His Lys Val
35 40 45

```
Pro Phe Phe Arg Lys Arg Lys His His Thr Cys Pro Cys Leu Pro Asn
    50                  55                  60
Leu Leu Cys Ser Arg Phe Pro Asp Gly Arg Tyr Arg Cys Ser Met Asp
65                  70                  75                  80
Leu Lys Asn Ile Asn Phe
                85
```

<210> 21
<211> 6
<212> PRT
<213> Homo sapiens

<400> 21
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Ala Val Ile Thr Gly Ala
 1               5
```

<210> 22
<211> 5
<212> PRT
<213> Homo sapiens

<400> 22
```
Val Ile Thr Gly Ala
 1               5
```

<210> 23
<211> 7
<212> PRT
<213> Homo sapiens

<400> 23
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Met Ala Val Ile Thr Gly Ala
 1               5
```

<210> 24
<211> 393
<212> PRT
<213> Homo sapiens

<400> 24
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Met Glu Thr Thr Met Gly Phe Met Asp Asp Asn Ala Thr Asn Thr Ser
 1               5                  10                  15
Thr Ser Phe Leu Ser Val Leu Asn Pro His Gly Ala His Ala Thr Ser
            20                  25                  30
Phe Pro Phe Asn Phe Ser Tyr Ser Asp Tyr Asp Met Pro Leu Asp Glu
        35                  40                  45
Asp Glu Asp Val Thr Asn Ser Arg Thr Phe Phe Ala Ala Lys Ile Val
    50                  55                  60
Ile Gly Met Ala Leu Val Gly Ile Met Leu Val Cys Gly Ile Gly Asn
```

```
65                  70                  75                  80
Phe Ile Phe Ile Ala Ala Leu Val Arg Tyr Lys Lys Leu Arg Asn Leu
                85                  90                  95
Thr Asn Leu Leu Ile Ala Asn Leu Ala Ile Ser Asp Phe Leu Val Ala
            100                 105                 110
Ile Val Cys Cys Pro Phe Glu Met Asp Tyr Tyr Val Val Arg Gln Leu
        115                 120                 125
Ser Trp Glu His Gly His Val Leu Cys Thr Ser Val Asn Tyr Leu Arg
    130                 135                 140
Thr Val Ser Leu Tyr Val Ser Thr Asn Ala Leu Leu Ala Ile Ala Ile
145                 150                 155                 160
Asp Arg Tyr Leu Ala Ile Val His Pro Leu Arg Pro Arg Met Lys Cys
                165                 170                 175
Gln Thr Ala Thr Gly Leu Ile Ala Leu Val Trp Thr Val Ser Ile Leu
            180                 185                 190
Ile Ala Ile Pro Ser Ala Tyr Phe Thr Thr Glu Thr Val Leu Val Ile
        195                 200                 205
Val Lys Ser Gln Glu Lys Ile Phe Cys Gly Gln Ile Trp Pro Val Asp
    210                 215                 220
Gln Gln Leu Tyr Tyr Lys Ser Tyr Phe Leu Phe Ile Phe Gly Ile Glu
225                 230                 235                 240
Phe Val Gly Pro Val Val Thr Met Thr Leu Cys Tyr Ala Arg Met Thr
                245                 250                 255
Arg Glu Leu Trp Phe Lys Ala Val Pro Gly Phe Gln Thr Glu Gln Ile
            260                 265                 270
Arg Lys Arg Leu Arg Cys Arg Arg Lys Thr Val Leu Val Leu Met Cys
        275                 280                 285
Ile Leu Thr Ala Tyr Val Leu Cys Trp Ala Pro Phe Tyr Gly Phe Thr
    290                 295                 300
Ile Val Arg Asp Phe Phe Pro Thr Val Phe Val Lys Glu Lys His Tyr
305                 310                 315                 320
Leu Thr Ala Phe Tyr Ile Val Glu Cys Ile Ala Met Ser Asn Ser Met
                325                 330                 335
Ile Asn Thr Leu Cys Phe Val Thr Val Lys Asn Asp Thr Val Lys Tyr
            340                 345                 350
Phe Lys Lys Ile Met Leu Leu His Trp Lys Ala Ser Tyr Asn Gly Gly
        355                 360                 365
Lys Ser Ser Ala Asp Leu Asp Leu Lys Thr Ile Gly Met Pro Ala Thr
    370                 375                 380
Glu Glu Val Asp Cys Ile Arg Leu Lys
385                 390
```

<210> 25
<211> 384
<212> PRT
<213> Homo sapiens

<400> 25

```
Met Ala Ala Gln Asn Gly Asn Thr Ser Phe Thr Pro Asn Phe Asn Pro
 1               5                  10                  15
Pro Gln Asp His Ala Ser Ser Leu Ser Phe Asn Phe Ser Tyr Gly Asp
            20                  25                  30
```

```
Tyr Asp Leu Pro Met Asp Glu Asp Glu Asp Met Thr Lys Thr Arg Thr
        35                  40                  45
Phe Phe Ala Ala Lys Ile Val Ile Gly Ile Ala Leu Ala Gly Ile Met
    50                  55                  60
Leu Val Cys Gly Ile Gly Asn Phe Val Phe Ile Ala Ala Leu Thr Arg
65                  70                  75                  80
Tyr Lys Lys Leu Arg Asn Leu Thr Asn Leu Leu Ile Ala Asn Leu Ala
                85                  90                  95
Ile Ser Asp Phe Leu Val Ala Ile Ile Cys Cys Pro Phe Glu Met Asp
            100                 105                 110
Tyr Tyr Val Val Arg Gln Leu Ser Trp Glu His Gly His Val Leu Cys
        115                 120                 125
Ala Ser Val Asn Tyr Leu Arg Thr Val Ser Leu Tyr Val Ser Thr Asn
    130                 135                 140
Ala Leu Leu Ala Ile Ala Ile Asp Arg Tyr Leu Ala Ile Val His Pro
145                 150                 155                 160
Leu Lys Pro Arg Met Asn Tyr Gln Thr Ala Ser Phe Leu Ile Ala Leu
                165                 170                 175
Val Trp Met Val Ser Ile Leu Ile Ala Ile Pro Ser Ala Tyr Phe Ala
            180                 185                 190
Thr Glu Thr Val Leu Phe Ile Val Lys Ser Gln Glu Lys Ile Phe Cys
        195                 200                 205
Gly Gln Ile Trp Pro Val Asp Gln Gln Leu Tyr Tyr Lys Ser Tyr Phe
    210                 215                 220
Leu Phe Ile Phe Gly Val Glu Phe Val Gly Pro Val Val Thr Met Thr
225                 230                 235                 240
Leu Cys Tyr Ala Arg Ile Ser Arg Glu Leu Trp Phe Lys Ala Val Pro
                245                 250                 255
Gly Phe Gln Thr Glu Gln Ile Arg Lys Arg Leu Arg Cys Arg Arg Lys
            260                 265                 270
Thr Val Leu Val Leu Met Cys Ile Leu Thr Ala Tyr Val Leu Cys Trp
        275                 280                 285
Ala Pro Phe Tyr Gly Phe Thr Ile Val Arg Asp Phe Phe Pro Thr Val
    290                 295                 300
Phe Val Lys Glu Lys His Tyr Leu Thr Ala Phe Tyr Val Val Glu Cys
305                 310                 315                 320
Ile Ala Met Ser Asn Ser Met Ile Asn Thr Val Cys Phe Val Thr Val
                325                 330                 335
Lys Asn Asn Thr Met Lys Tyr Phe Lys Lys Met Met Leu Leu His Trp
            340                 345                 350
Arg Pro Ser Gln Arg Gly Ser Lys Ser Ser Ala Asp Leu Asp Leu Arg
        355                 360                 365
Thr Asn Gly Val Pro Thr Thr Glu Glu Val Asp Cys Ile Arg Leu Lys
    370                 375                 380


<210> 26
<211> 393
<212> PRT
<213> Mus musculus

<400> 26
Met Glu Thr Thr Val Gly Ala Leu Gly Glu Asn Thr Thr Asp Thr Phe
```

```
 1               5                  10                  15
Thr Asp Phe Phe Ser Ala Leu Asp Gly His Glu Ala Gln Thr Gly Ser
            20                  25                  30
Leu Pro Phe Thr Phe Ser Tyr Gly Asp Tyr Asp Met Pro Leu Asp Glu
        35                  40                  45
Glu Glu Asp Val Thr Asn Ser Arg Thr Phe Phe Ala Ala Lys Ile Val
    50                  55                  60
Ile Gly Met Ala Leu Val Gly Ile Met Leu Val Cys Gly Ile Gly Asn
65                  70                  75                  80
Phe Ile Phe Ile Thr Ala Leu Ala Arg Tyr Lys Lys Leu Arg Asn Leu
                85                  90                  95
Thr Asn Leu Leu Ile Ala Asn Leu Ala Ile Ser Asp Phe Leu Val Ala
            100                 105                 110
Ile Val Cys Cys Pro Phe Glu Met Asp Tyr Tyr Val Val Arg Gln Leu
        115                 120                 125
Ser Trp Glu His Gly His Val Leu Cys Ala Ser Val Asn Tyr Leu Arg
    130                 135                 140
Thr Val Ser Leu Tyr Val Ser Thr Asn Ala Leu Leu Ala Ile Ala Ile
145                 150                 155                 160
Asp Arg Tyr Leu Ala Ile Val His Pro Leu Arg Pro Arg Met Lys Cys
                165                 170                 175
Gln Thr Ala Ala Gly Leu Ile Phe Leu Val Trp Ser Val Ser Ile Leu
            180                 185                 190
Ile Ala Ile Pro Ala Ala Tyr Phe Thr Thr Glu Thr Val Leu Val Ile
        195                 200                 205
Val Glu Arg Gln Glu Lys Ile Phe Cys Gly Gln Ile Trp Pro Val Asp
    210                 215                 220
Gln Gln Phe Tyr Tyr Arg Ser Tyr Phe Leu Leu Val Phe Gly Leu Glu
225                 230                 235                 240
Phe Val Gly Pro Val Val Ala Met Thr Leu Cys Tyr Ala Arg Val Ser
                245                 250                 255
Arg Glu Leu Trp Phe Lys Ala Val Pro Gly Phe Gln Thr Glu Gln Ile
            260                 265                 270
Arg Arg Thr Val Arg Cys Arg Arg Arg Thr Val Leu Gly Leu Val Cys
        275                 280                 285
Val Leu Ser Ala Tyr Val Leu Cys Trp Ala Pro Phe Tyr Gly Phe Thr
    290                 295                 300
Ile Val Arg Asp Phe Phe Pro Ser Val Phe Val Lys Glu Lys His Tyr
305                 310                 315                 320
Leu Thr Ala Phe Tyr Val Val Glu Cys Ile Ala Met Ser Asn Ser Met
                325                 330                 335
Ile Asn Thr Leu Cys Phe Val Thr Val Arg Asn Asn Thr Ser Lys Tyr
            340                 345                 350
Leu Lys Arg Ile Leu Arg Leu Gln Trp Arg Ala Ser Pro Ser Gly Ser
        355                 360                 365
Lys Ala Ser Ala Asp Leu Asp Leu Arg Thr Thr Gly Ile Pro Ala Thr
    370                 375                 380
Glu Glu Val Asp Cys Ile Arg Leu Lys
385                 390
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<210> 27
<211> 381

<212> PRT
<213> Mus musculus

<400> 27

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Met Gly Pro Gln Asn Arg Asn Thr Ser Phe Ala Pro Asp Leu Asn Pro
 1               5                  10                  15
Pro Gln Asp His Val Ser Leu Asn Tyr Ser Tyr Gly Asp Tyr Asp Leu
            20                  25                  30
Pro Leu Gly Glu Asp Glu Asp Val Thr Lys Thr Gln Thr Phe Phe Ala
        35                  40                  45
Ala Lys Ile Val Ile Gly Val Ala Leu Ala Gly Ile Met Leu Val Cys
    50                  55                  60
Gly Ile Gly Asn Phe Val Phe Ile Ala Ala Leu Ala Arg Tyr Lys Lys
65                  70                  75                  80
Leu Arg Asn Leu Thr Asn Leu Leu Ile Ala Asn Leu Ala Ile Ser Asp
                85                  90                  95
Phe Leu Val Ala Ile Val Cys Cys Pro Phe Glu Met Asp Tyr Tyr Val
            100                 105                 110
Val Arg Gln Leu Ser Trp Ala His Gly His Val Leu Cys Ala Ser Val
        115                 120                 125
Asn Tyr Leu Arg Thr Val Ser Leu Tyr Val Ser Thr Asn Ala Leu Leu
    130                 135                 140
Ala Ile Ala Ile Asp Arg Tyr Leu Ala Ile Val His Pro Leu Lys Pro
145                 150                 155                 160
Arg Met Asn Tyr Gln Thr Ala Ser Phe Leu Ile Ala Leu Val Trp Met
                165                 170                 175
Val Ser Ile Leu Ile Ala Val Pro Ser Ala Tyr Phe Thr Thr Glu Thr
            180                 185                 190
Ile Leu Val Ile Val Lys Asn Gln Glu Lys Ile Phe Cys Gly Gln Ile
        195                 200                 205
Trp Ser Val Asp Gln Gln Leu Tyr Tyr Lys Ser Tyr Phe Leu Phe Val
    210                 215                 220
Phe Gly Leu Glu Phe Val Gly Pro Val Val Thr Met Thr Leu Cys Tyr
225                 230                 235                 240
Ala Arg Ile Ser Gln Glu Leu Trp Phe Lys Ala Val Pro Gly Phe Gln
                245                 250                 255
Thr Glu Gln Ile Arg Lys Arg Leu Arg Cys Arg Arg Lys Thr Val Leu
            260                 265                 270
Leu Leu Met Gly Ile Leu Thr Ala Tyr Val Leu Cys Trp Ala Pro Phe
        275                 280                 285
Tyr Gly Phe Thr Ile Val Arg Asp Phe Phe Pro Thr Val Val Val Lys
    290                 295                 300
Glu Lys His Tyr Leu Thr Ala Phe Tyr Val Val Glu Cys Ile Ala Met
305                 310                 315                 320
Ser Asn Ser Met Ile Asn Thr Ile Cys Phe Val Thr Val Lys Asn Asn
                325                 330                 335
Thr Met Lys Tyr Phe Lys Lys Met Leu Arg Leu His Trp Arg Pro Ser
            340                 345                 350
His Tyr Gly Ser Lys Ser Ser Ala Asp Leu Asp Leu Lys Thr Ser Gly
        355                 360                 365
Val Pro Ala Thr Glu Glu Val Asp Cys Ile Arg Leu Lys
    370                 375                 380
```

<210> 28
<211> 86
<212> PRT
<213> Mus musculus

<400> 28
Ala Val Ile Thr Gly Ala Cys Glu Arg Asp Ile Gln Cys Gly Ala Gly
1 5 10 15
Thr Cys Cys Ala Ile Ser Leu Trp Leu Arg Gly Leu Arg Leu Cys Thr
20 25 30
Pro Leu Gly Arg Glu Gly Glu Glu Cys His Pro Gly Ser His Lys Ile
35 40 45
Pro Phe Leu Arg Lys Arg Gln His His Thr Cys Pro Cys Ser Pro Ser
50 55 60
Leu Leu Cys Ser Arg Phe Pro Asp Gly Arg Tyr Arg Cys Phe Arg Asp
65 70 75 80
Leu Lys Asn Ala Asn Phe
85

<210> 29
<211> 81
<212> PRT
<213> Mus musculus

<400> 29
Ala Val Ile Thr Gly Ala Cys Asp Lys Asp Ser Gln Cys Gly Gly Gly
1 5 10 15
Met Cys Cys Ala Val Ser Ile Trp Val Lys Ser Ile Arg Ile Cys Thr
20 25 30
Pro Met Gly Gln Val Gly Asp Ser Cys His Pro Leu Thr Arg Lys Val
35 40 45
Pro Phe Trp Gly Arg Arg Met His His Thr Cys Pro Cys Leu Pro Gly
50 55 60
Leu Ala Cys Leu Arg Thr Ser Phe Asn Arg Phe Ile Cys Leu Ala Arg
65 70 75 80
Lys

<210> 30
<211> 86
<212> PRT
<213> Rattus sp.

<400> 30
Ala Val Ile Thr Gly Ala Cys Glu Arg Asp Val Gln Cys Gly Ala Gly
1 5 10 15
Thr Cys Cys Ala Ile Ser Leu Trp Leu Arg Gly Leu Arg Leu Cys Thr
20 25 30
Pro Leu Gly Arg Glu Gly Glu Glu Cys His Pro Gly Ser His Lys Ile
35 40 45

```
Pro Phe Phe Arg Lys Arg Gln His His Thr Cys Pro Cys Ser Pro Ser
    50                  55                  60
Leu Leu Cys Ser Arg Phe Pro Asp Gly Arg Tyr Arg Cys Ser Gln Asp
65                  70                  75                  80
Leu Lys Asn Val Asn Phe
                85
```

<210> 31
<211> 81
<212> PRT
<213> Rattus sp.

<400> 31

```
Ala Val Ile Thr Gly Ala Cys Asp Lys Asp Ser Gln Cys Gly Gly Gly
 1               5                  10                  15
Met Cys Cys Ala Val Ser Ile Trp Val Lys Ser Ile Arg Ile Cys Thr
            20                  25                  30
Pro Met Gly Gln Val Gly Asp Ser Cys His Pro Leu Thr Arg Lys Val
        35                  40                  45
Pro Phe Trp Gly Arg Arg Met His His Thr Cys Pro Cys Leu Pro Gly
    50                  55                  60
Leu Ala Cys Leu Arg Thr Ser Phe Asn Arg Phe Ile Cys Leu Ala Arg
65                  70                  75                  80
Lys
```

<210> 32
<211> 77
<212> PRT
<213> Bombina maxima

<400> 32

```
Ala Val Ile Thr Gly Ala Cys Asp Arg Asp Val Gln Cys Gly Ser Gly
 1               5                  10                  15
Thr Cys Cys Ala Ala Ser Leu Trp Ser Arg Asn Ile Arg Phe Cys Val
            20                  25                  30
Pro Leu Gly Asn Asn Gly Glu Glu Cys His Pro Ala Ser His Lys Val
        35                  40                  45
Pro Tyr Asn Gly Lys Arg Leu Ser Ser Leu Cys Pro Cys Lys Ser Gly
    50                  55                  60
Leu Thr Cys Ser Lys Ser Gly Glu Lys Phe Gln Cys Ser
65                  70                  75
```

<210> 33
<211> 1204
<212> DNA
<213> Macaca mulatta

<220>
<221> CDS

<222> (5)...(329)

<400> 33

```
cgcc atg agg agc ctg tgc tgc gcc cca ctc ctg ctc ctc ctg ctg ctg      49
     Met Arg Ser Leu Cys Cys Ala Pro Leu Leu Leu Leu Leu Leu Leu
      1               5                  10                  15

ccg ccg ctg ctg ctc acg ccc cgc gtc ggg gac gcc gcc gtg atc acc      97
Pro Pro Leu Leu Leu Thr Pro Arg Val Gly Asp Ala Ala Val Ile Thr
                 20                  25                  30

ggg gct tgt gac aag gac tcc caa tgt ggt gga ggc atg tgc tgt gct     145
Gly Ala Cys Asp Lys Asp Ser Gln Cys Gly Gly Gly Met Cys Cys Ala
             35                  40                  45

gtc agt atc tgg gtt aag agc ata agg att tgc aca cct atg ggc aaa     193
Val Ser Ile Trp Val Lys Ser Ile Arg Ile Cys Thr Pro Met Gly Lys
         50                  55                  60

ctg gga gac agc tgc cat cca ctg act cgt aaa gtt cca ttt gtt ggg     241
Leu Gly Asp Ser Cys His Pro Leu Thr Arg Lys Val Pro Phe Val Gly
     65                  70                  75

cgg agg atg cat cac act tgc cca tgt ctg cca ggc ttg gcc tgt tta     289
Arg Arg Met His His Thr Cys Pro Cys Leu Pro Gly Leu Ala Cys Leu
 80                  85                  90                  95

cgg act tca ttt aac cga ttt att tgt tta gcc cga aag t aatcgcttta     339
Arg Thr Ser Phe Asn Arg Phe Ile Cys Leu Ala Arg Lys
                100                 105

aagtagaaac caaatgtgaa tagccacatc ttatctgtaa agtcttactt gtgattgtgc    399
caaacaaaaa atgtgccaga aagaaatgct tttgcttcct caactttcca agtaactttt    459
ttatctttga gttttaaatg attttttttt taatcgggaa ttttactttt ggatagaaat    519
ataaagtgta aggcattgtg gaactggttc tcatttccct gtttgtgttt tggtttggtt    579
tggctttttt cttaaatgtc aaaaacatac ccattttcac aaaaatgagg aaaataggaa    639
tttgatattt tgttagagaa actttttttt tcctcaccat cccaagcccc atttgtgccc    699
cgccacacca taccatacat acatacatac atacatacat acatacatac aacttttggt    759
cccttgcctc ttccacctca aagaatttca aggcccttac cttactttat ttttctccat    819
ttctcttccc tgctcttgca ttttaaagtg gtaggtttat ctctttgagt ttgatggcag    879
aatcgctgat gggaatccag ctttttgccg gctatttaaa tagtgaaaag agtttatatg    939
tgaacttgac actccaaact cctctcatgg cgtggacgct gggagtgctg ccggaccctt    999
cctaaacctg tcactcaaga ggacttcggc tctgctgttg ggctggtgtg tggacagaag   1059
gaatggaaag ctaaattaat ttagtccaga tttctaggtt tgggtttttc taaaaatgaa   1119
agattacgtt tacttctttt tctttttata aagttttttt ttcttagtct cctacttaga   1179
gatattctag aaaatgtcac ttgaa                                        1204
```

<210> 34
<211> 108
<212> PRT
<213> Macaca mulatta

<400> 34

```
Met Arg Ser Leu Cys Cys Ala Pro Leu Leu Leu Leu Leu Leu Pro
 1               5                  10                  15
Pro Leu Leu Leu Thr Pro Arg Val Gly Asp Ala Ala Val Ile Thr Gly
            20                  25                  30
Ala Cys Asp Lys Asp Ser Gln Cys Gly Gly Gly Met Cys Cys Ala Val
        35                  40                  45
Ser Ile Trp Val Lys Ser Ile Arg Ile Cys Thr Pro Met Gly Lys Leu
    50                  55                  60
Gly Asp Ser Cys His Pro Leu Thr Arg Lys Val Pro Phe Val Gly Arg
65                  70                  75                  80
Arg Met His His Thr Cys Pro Cys Leu Pro Gly Leu Ala Cys Leu Arg
                85                  90                  95
Thr Ser Phe Asn Arg Phe Ile Cys Leu Ala Arg Lys
            100                 105
```

<210> 35
<211> 1155
<212> DNA
<213> Pan troglodyte

<220>
<221> CDS
<222> (1)...(1155)

<400> 35

```
atg gca gcc cag aat gga aac acc agt ttc gca ccc aac ttt aat cca       48
Met Ala Ala Gln Asn Gly Asn Thr Ser Phe Ala Pro Asn Phe Asn Pro
 1               5                  10                  15

ccg caa gac cat gcc tcc tcc ctc tcc ttt aac ttc agt tat ggt gat       96
Pro Gln Asp His Ala Ser Ser Leu Ser Phe Asn Phe Ser Tyr Gly Asp
            20                  25                  30

tat gac ctc cct atg gat gag gat gag gac atg acc aag acc cgg acc      144
Tyr Asp Leu Pro Met Asp Glu Asp Glu Asp Met Thr Lys Thr Arg Thr
        35                  40                  45

ttc ctc gca gcc aag atc gtc gtt ggc att gca ctg gca ggc atc atg      192
Phe Leu Ala Ala Lys Ile Val Val Gly Ile Ala Leu Ala Gly Ile Met
    50                  55                  60

ctg gtc tgc ggc atc ggt aac ttt gtc ttt atc gct gcc ctc acc cgc      240
Leu Val Cys Gly Ile Gly Asn Phe Val Phe Ile Ala Ala Leu Thr Arg
65                  70                  75                  80

tat aag aag ttg cgc aac ctc acc aat ctg ctc att gcc aac ctg gcc      288
Tyr Lys Lys Leu Arg Asn Leu Thr Asn Leu Leu Ile Ala Asn Leu Ala
                85                  90                  95

atc tcc gac ttc ctg gtg gcc atc atc tgc tgc ccc ttc gag atg gac      336
Ile Ser Asp Phe Leu Val Ala Ile Ile Cys Cys Pro Phe Glu Met Asp
            100                 105                 110
```

```
tac tac gtg gta cgg cag ctc tcc tgg gag cat ggc cac gtg ctc tgt      384
Tyr Tyr Val Val Arg Gln Leu Ser Trp Glu His Gly His Val Leu Cys
        115                 120                 125

gcc tcc gtc aac tac ctg cgc acc gtc tcc ctc tac gtc tcc acc aat      432
Ala Ser Val Asn Tyr Leu Arg Thr Val Ser Leu Tyr Val Ser Thr Asn
    130                 135                 140

gcc ttg ctg gcc atc gcc att gac aga tat ctc gcc att gtt cac cct      480
Ala Leu Leu Ala Ile Ala Ile Asp Arg Tyr Leu Ala Ile Val His Pro
145                 150                 155                 160

ttg aaa cca cgg atg aat tat caa acg gcc tcc ttc ctg atc gcc ttg      528
Leu Lys Pro Arg Met Asn Tyr Gln Thr Ala Ser Phe Leu Ile Ala Leu
                165                 170                 175

gtc tgg atg gtg tcc att ctc att gcc atc cca tcg gcc tac ttt gca      576
Val Trp Met Val Ser Ile Leu Ile Ala Ile Pro Ser Ala Tyr Phe Ala
            180                 185                 190

aca gaa acc gtc ctc ttt att gtc aag agc cag gag aag atc ttc tgt      624
Thr Glu Thr Val Leu Phe Ile Val Lys Ser Gln Glu Lys Ile Phe Cys
        195                 200                 205

ggc cag atc tgg ccc gtg gat cag cag ctc tac tac aag tcc tac ttc      672
Gly Gln Ile Trp Pro Val Asp Gln Gln Leu Tyr Tyr Lys Ser Tyr Phe
    210                 215                 220

ctc ttc atc ttt ggt gtc gag ttc gtg ggc cct gtg gtc acc atg acc      720
Leu Phe Ile Phe Gly Val Glu Phe Val Gly Pro Val Val Thr Met Thr
225                 230                 235                 240

ctg tgc tat gcc agg atc tcc cgg gag ctc tgg ttc aag gca gtc cct      768
Leu Cys Tyr Ala Arg Ile Ser Arg Glu Leu Trp Phe Lys Ala Val Pro
                245                 250                 255

ggg ttc cag acg gag cag att cgc aag cgg ctg cgc tgc cgc agg aag      816
Gly Phe Gln Thr Glu Gln Ile Arg Lys Arg Leu Arg Cys Arg Arg Lys
            260                 265                 270

acg gtc ctg gtg ctc atg tgc att ctc acg gcc tat gtg ctg tgc tgg      864
Thr Val Leu Val Leu Met Cys Ile Leu Thr Ala Tyr Val Leu Cys Trp
        275                 280                 285

gca ccc ttc tac ggt ttc acc atc gtt cgt gac ttc ttc ccc act gtg      912
Ala Pro Phe Tyr Gly Phe Thr Ile Val Arg Asp Phe Phe Pro Thr Val
    290                 295                 300

ttc gtg aag gaa aag cac tac ctc act gcc ttc tac gtg gtc gag tgc      960
Phe Val Lys Glu Lys His Tyr Leu Thr Ala Phe Tyr Val Val Glu Cys
305                 310                 315                 320

atc gcc atg agc aac agc atg atc aac acc gtg tgc ttc gtg acg gtc     1008
```

```
Ile Ala Met Ser Asn Ser Met Ile Asn Thr Val Cys Phe Val Thr Val
                325                 330                 335

aag aac aac acc atg aag tac ttc aag aag atg atg ctg ctg cac tgg     1056
Lys Asn Asn Thr Met Lys Tyr Phe Lys Lys Met Met Leu Leu His Trp
            340                 345                 350

cgt ccc tcc cag cgg ggg agc aag tcc agt gcc gac ctt gac ctc aga     1104
Arg Pro Ser Gln Arg Gly Ser Lys Ser Ser Ala Asp Leu Asp Leu Arg
        355                 360                 365

acc aac ggg gtg ccc gcc aca gaa gag gtg gac tgt atc agg ctg aag     1152
Thr Asn Gly Val Pro Ala Thr Glu Glu Val Asp Cys Ile Arg Leu Lys
    370                 375                 380

tga                                                                 1155
 *
```

<210> 36
<211> 384
<212> PRT
<213> Pan troglodyte

<400> 36

```
Met Ala Ala Gln Asn Gly Asn Thr Ser Phe Ala Pro Asn Phe Asn Pro
 1               5                  10                  15
Pro Gln Asp His Ala Ser Ser Leu Ser Phe Asn Phe Ser Tyr Gly Asp
            20                  25                  30
Tyr Asp Leu Pro Met Asp Glu Asp Glu Asp Met Thr Lys Thr Arg Thr
        35                  40                  45
Phe Leu Ala Ala Lys Ile Val Val Gly Ile Ala Leu Ala Gly Ile Met
    50                  55                  60
Leu Val Cys Gly Ile Gly Asn Phe Val Phe Ile Ala Ala Leu Thr Arg
65                  70                  75                  80
Tyr Lys Lys Leu Arg Asn Leu Thr Asn Leu Leu Ile Ala Asn Leu Ala
                85                  90                  95
Ile Ser Asp Phe Leu Val Ala Ile Ile Cys Cys Pro Phe Glu Met Asp
            100                 105                 110
Tyr Tyr Val Val Arg Gln Leu Ser Trp Glu His Gly His Val Leu Cys
        115                 120                 125
Ala Ser Val Asn Tyr Leu Arg Thr Val Ser Leu Tyr Val Ser Thr Asn
    130                 135                 140
Ala Leu Leu Ala Ile Ala Ile Asp Arg Tyr Leu Ala Ile Val His Pro
145                 150                 155                 160
Leu Lys Pro Arg Met Asn Tyr Gln Thr Ala Ser Phe Leu Ile Ala Leu
                165                 170                 175
Val Trp Met Val Ser Ile Leu Ile Ala Ile Pro Ser Ala Tyr Phe Ala
            180                 185                 190
Thr Glu Thr Val Leu Phe Ile Val Lys Ser Gln Glu Lys Ile Phe Cys
        195                 200                 205
Gly Gln Ile Trp Pro Val Asp Gln Gln Leu Tyr Tyr Lys Ser Tyr Phe
```

```
    210                 215                 220
Leu Phe Ile Phe Gly Val Glu Phe Val Gly Pro Val Val Thr Met Thr
225                 230                 235                 240
Leu Cys Tyr Ala Arg Ile Ser Arg Glu Leu Trp Phe Lys Ala Val Pro
                245                 250                 255
Gly Phe Gln Thr Glu Gln Ile Arg Lys Arg Leu Arg Cys Arg Arg Lys
            260                 265                 270
Thr Val Leu Val Leu Met Cys Ile Leu Thr Ala Tyr Val Leu Cys Trp
        275                 280                 285
Ala Pro Phe Tyr Gly Phe Thr Ile Val Arg Asp Phe Phe Pro Thr Val
    290                 295                 300
Phe Val Lys Glu Lys His Tyr Leu Thr Ala Phe Tyr Val Val Glu Cys
305                 310                 315                 320
Ile Ala Met Ser Asn Ser Met Ile Asn Thr Val Cys Phe Val Thr Val
                325                 330                 335
Lys Asn Asn Thr Met Lys Tyr Phe Lys Lys Met Met Leu Leu His Trp
            340                 345                 350
Arg Pro Ser Gln Arg Gly Ser Lys Ser Ser Ala Asp Leu Asp Leu Arg
        355                 360                 365
Thr Asn Gly Val Pro Ala Thr Glu Glu Val Asp Cys Ile Arg Leu Lys
    370                 375                 380
```

<210> 37
<211> 1155
<212> DNA
<213> Saimiri sciureus

<220>
<221> CDS
<222> (1)...(1155)

<400> 37

```
atg gca gcc cag aat gga aac acc agt ttt gca ccc aac ttt aat cca       48
Met Ala Ala Gln Asn Gly Asn Thr Ser Phe Ala Pro Asn Phe Asn Pro
 1               5                  10                  15

ccc caa gac cat gcc tcc tcc ctc tcc ttc aac ttc agt tat ggt gat       96
Pro Gln Asp His Ala Ser Ser Leu Ser Phe Asn Phe Ser Tyr Gly Asp
             20                  25                  30

tac gac ctc cct atg gat gag gat gag gac atg acc aag acc cgg acc      144
Tyr Asp Leu Pro Met Asp Glu Asp Glu Asp Met Thr Lys Thr Arg Thr
         35                  40                  45

ttc ttt gca gcc aag att gtc atc ggc att gca ctg gca ggc atc atg      192
Phe Phe Ala Ala Lys Ile Val Ile Gly Ile Ala Leu Ala Gly Ile Met
     50                  55                  60

ctg gtc tgt ggt gtc ggt aac ttt gtc ttt atc gct gcc ctc acc cgc      240
Leu Val Cys Gly Val Gly Asn Phe Val Phe Ile Ala Ala Leu Thr Arg
 65                  70                  75                  80

tat aag aag ctg cgc aac ctc acc aat ctg ctc att gcc aac ctg gcc      288
```

```
Tyr Lys Lys Leu Arg Asn Leu Thr Asn Leu Leu Ile Ala Asn Leu Ala
                 85                  90                  95

atc tcc gac ttc ctg gtg gcc atc atc tgc tgc ccc ttt gag atg gac      336
Ile Ser Asp Phe Leu Val Ala Ile Ile Cys Cys Pro Phe Glu Met Asp
            100                 105                 110

tac tat gtg gtc cgg cag ctc tcc tgg gag cat ggc cac gtg ctc tgt      384
Tyr Tyr Val Val Arg Gln Leu Ser Trp Glu His Gly His Val Leu Cys
        115                 120                 125

gcc tct gtc aac tac ctg cgc acc gtc tcc ctc tac gtc tcc acc aat      432
Ala Ser Val Asn Tyr Leu Arg Thr Val Ser Leu Tyr Val Ser Thr Asn
    130                 135                 140

gcc ttg ctg gcc atc gcc att gac aga tat ctc gcc att gtt cac ccc      480
Ala Leu Leu Ala Ile Ala Ile Asp Arg Tyr Leu Ala Ile Val His Pro
145                 150                 155                 160

ttg aaa cca agg atg aat tat caa acg gcc tcc ttc ctg atc gcc ttg      528
Leu Lys Pro Arg Met Asn Tyr Gln Thr Ala Ser Phe Leu Ile Ala Leu
                165                 170                 175

gtc tgg atg gta tcc att ctc att gcc atc cca tca gcc tac ttt gca      576
Val Trp Met Val Ser Ile Leu Ile Ala Ile Pro Ser Ala Tyr Phe Ala
            180                 185                 190

aca gaa acc gtc ctc ttt att gtc aag agc cag gag aag atc ttc tgt      624
Thr Glu Thr Val Leu Phe Ile Val Lys Ser Gln Glu Lys Ile Phe Cys
        195                 200                 205

ggc cag atc tgg ccc gtg gat cag cag ctc tac tac aag tcc tac ttc      672
Gly Gln Ile Trp Pro Val Asp Gln Gln Leu Tyr Tyr Lys Ser Tyr Phe
    210                 215                 220

ctc ttc atc ttt ggt gtg gag ttc gtg ggt cct gtg gtc acc atg acc      720
Leu Phe Ile Phe Gly Val Glu Phe Val Gly Pro Val Val Thr Met Thr
225                 230                 235                 240

ctg tgc tac gcc agg att tcc cag gag ctc tgg ttc aag gca gtc cct      768
Leu Cys Tyr Ala Arg Ile Ser Gln Glu Leu Trp Phe Lys Ala Val Pro
                245                 250                 255

ggg ttc cag aca gag cag atc cgt aag cgg ctg cgc tgc cgc agg aag      816
Gly Phe Gln Thr Glu Gln Ile Arg Lys Arg Leu Arg Cys Arg Arg Lys
            260                 265                 270

aca gtc ctg gtg ctc atg tgc atc ctc atg gcc tac gtg cta tgc tgg      864
Thr Val Leu Val Leu Met Cys Ile Leu Met Ala Tyr Val Leu Cys Trp
        275                 280                 285

gca ccc ttc tat ggt ttc acc atc gta cgc gac ttc ttc ccc acc gtg      912
Ala Pro Phe Tyr Gly Phe Thr Ile Val Arg Asp Phe Phe Pro Thr Val
```

```
    290                 295                 300

ttc gta aag gaa aag cac tac ctc act gcc ttc tac gtg gtc gag tgc      960
Phe Val Lys Glu Lys His Tyr Leu Thr Ala Phe Tyr Val Val Glu Cys
305                 310                 315                 320

atc gcc atg agc aac agc atg atc aac acc gtg tgc ttc gtg acg gtc     1008
Ile Ala Met Ser Asn Ser Met Ile Asn Thr Val Cys Phe Val Thr Val
                325                 330                 335

aag aac aac acc atg aag tat ttc aag aag atg atg ctg ctg cac tgg     1056
Lys Asn Asn Thr Met Lys Tyr Phe Lys Lys Met Met Leu Leu His Trp
            340                 345                 350

cgt ccc tcc cag cgg ggg agc aag tcc agt gcc gac ctt gac ctt aag     1104
Arg Pro Ser Gln Arg Gly Ser Lys Ser Ser Ala Asp Leu Asp Leu Lys
        355                 360                 365

acg aac ggg gtg cct gcc acg gaa gag gtg gac tgt atc agg ctg aag     1152
Thr Asn Gly Val Pro Ala Thr Glu Glu Val Asp Cys Ile Arg Leu Lys
    370                 375                 380

tga                                                                1155
 *
```

<210> 38
<211> 384
<212> PRT
<213> Saimiri sciureus

<400> 38

```
Met Ala Ala Gln Asn Gly Asn Thr Ser Phe Ala Pro Asn Phe Asn Pro
 1               5                  10                  15
Pro Gln Asp His Ala Ser Ser Leu Ser Phe Asn Phe Ser Tyr Gly Asp
            20                  25                  30
Tyr Asp Leu Pro Met Asp Glu Asp Glu Asp Met Thr Lys Thr Arg Thr
        35                  40                  45
Phe Phe Ala Ala Lys Ile Val Ile Gly Ile Ala Leu Ala Gly Ile Met
    50                  55                  60
Leu Val Cys Gly Val Gly Asn Phe Val Phe Ile Ala Ala Leu Thr Arg
65                  70                  75                  80
Tyr Lys Lys Leu Arg Asn Leu Thr Asn Leu Leu Ile Ala Asn Leu Ala
                85                  90                  95
Ile Ser Asp Phe Leu Val Ala Ile Ile Cys Cys Pro Phe Glu Met Asp
            100                 105                 110
Tyr Tyr Val Val Arg Gln Leu Ser Trp Glu His Gly His Val Leu Cys
        115                 120                 125
Ala Ser Val Asn Tyr Leu Arg Thr Val Ser Leu Tyr Val Ser Thr Asn
    130                 135                 140
Ala Leu Leu Ala Ile Ala Ile Asp Arg Tyr Leu Ala Ile Val His Pro
145                 150                 155                 160
```

```
Leu Lys Pro Arg Met Asn Tyr Gln Thr Ala Ser Phe Leu Ile Ala Leu
                165                 170                 175
Val Trp Met Val Ser Ile Leu Ile Ala Ile Pro Ser Ala Tyr Phe Ala
            180                 185                 190
Thr Glu Thr Val Leu Phe Ile Val Lys Ser Gln Glu Lys Ile Phe Cys
        195                 200                 205
Gly Gln Ile Trp Pro Val Asp Gln Gln Leu Tyr Tyr Lys Ser Tyr Phe
    210                 215                 220
Leu Phe Ile Phe Gly Val Glu Phe Val Gly Pro Val Val Thr Met Thr
225                 230                 235                 240
Leu Cys Tyr Ala Arg Ile Ser Gln Glu Leu Trp Phe Lys Ala Val Pro
                245                 250                 255
Gly Phe Gln Thr Glu Gln Ile Arg Lys Arg Leu Arg Cys Arg Arg Lys
            260                 265                 270
Thr Val Leu Val Leu Met Cys Ile Leu Met Ala Tyr Val Leu Cys Trp
        275                 280                 285
Ala Pro Phe Tyr Gly Phe Thr Ile Val Arg Asp Phe Phe Pro Thr Val
    290                 295                 300
Phe Val Lys Glu Lys His Tyr Leu Thr Ala Phe Tyr Val Val Glu Cys
305                 310                 315                 320
Ile Ala Met Ser Asn Ser Met Ile Asn Thr Val Cys Phe Val Thr Val
                325                 330                 335
Lys Asn Asn Thr Met Lys Tyr Phe Lys Lys Met Met Leu Leu His Trp
            340                 345                 350
Arg Pro Ser Gln Arg Gly Ser Lys Ser Ser Ala Asp Leu Asp Leu Lys
        355                 360                 365
Thr Asn Gly Val Pro Ala Thr Glu Glu Val Asp Cys Ile Arg Leu Lys
    370                 375                 380
```

<210> 39
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic construct

<400> 39

```
Met Val Ile Thr Gly Ala
 1               5
```